case should be small, 2 c.c. or 3 c.c. was sufficient. Because of the risk, he (Dr. Symonds) would not perform lumbar puncture in any case in which the diagnosis could be settled without it. That procedure should be reserved for cases in which there was doubt; in such cases it might afford just the information one was seeking.

In none of his (the speaker's) three cases of non-suppurative encephalitis had a leucocyte count been made, but in Adson's three cases a polymorphonuclear leucocytosis had been found such as would be expected in cerebral abscess, and therefore it was not a differentiating point.

Sir William Milligan had said that the symptoms in cases of so-called pseudo-brain abscess might be due to serous meningitis, but what he (the speaker) thought was that a collection of fluid on the surface sufficiently large to cause those symptoms must also be sufficiently large to be readily detectable at operation; and in the two cases of his own which were operated upon, and in Adson's cases, no such collection had been found. It took a large collection of fluid on the brain to cause aphasia, extensor plantar response on the opposite side and swelling of the optic discs. Further, in one case there had been involvement of the optic radiation, which could not have been caused by a superficial lesion. That was why he (Dr. Symonds) suggested the alternative explanation that these were cases of non-suppurative inflammation, something which never reached a breaking-down stage. He did not feel satisfied about this as a pathological proposition, because it did not take place in the ordinary way within the body. But it occurred in the skin, and an analogous instance could be found in amœbic hepatitis which often cleared up without any evacuation of pus.

Care should be taken in following up these cases. A patient might have a small brain abscess with a surrounding area of encephalitis, which might cause symptoms and signs, and as the abscess became more shut off the physical signs would diminish, though the abscess remained. Such an abscess might cause further symptoms, even after an interval of three years, as in a gunshot wound case of his own.

He had purposely not dealt with the atypical varieties of brain abscess, partly because he had not had much experience of them. He had seen one case of anterior temporal abscess with uncinate attacks, and two or three cases in which an abscess of the antero-inferior surface of the cerebellum was present without any of the inco-ordination of the limbs usually found in a deeply situated abscess of the lateral lobe.

ILLUSTRATIVE CASES.

Cerebellar Abscess.

By R. J. CANN, L.R.C.P.Lond., M.R.C.S.Eng. (introduced by Mr. T. B. LAYTON).

R. A., MALE, aged 20.

In 1924, discharge from left ear. A polyp was removed—intermittent discharge afterwards.

Seen again November 4, 1926. Recurrence of aural discharge for one week, following a cold. During subsequent week complained of severe diffuse headache, frequent vomiting—became visibly thinner.

November 11, 1926.—Aural discharge profuse; drumhead obscured by granulation; no mastoid tenderness; slight facial weakness left side; no nystagmus; suspicion of paralysis of left external rectus muscle; reflexes normal; pointing error with left arm observed once, but not repeated; one observer thought nose-finger-nose test deficient on left side; headache now referred to occipital region; some rigidity of neck; temperature 100° F.

Same evening cortical mastoid operation by Mr. T. B. Layton; bone dense; pus in mastoid antrum; granulations on dura over transverse sinus; dura of middle and posterior fossæ exposed.

November 12, 1926 ; afternoon.—Patient comfortable, answered questions readily. Temperature, 98·6° F. ; pulse, 70 ; left-sided facial weakness still present : left pupil smaller than right, both reacting to light ; coarse horizontal changing nystagmus, more marked to left than right ; knee- and ankle-jerks exaggerated ; Kernig's sign negative ; rigidity of neck unchanged ; inco-ordination of left arm shown by nose-finger-nose test ; diadokokinesis positive for left arm.

Later same afternoon patient suddenly complained of intense headache and required morphia to ease him.

November 13, 1926 ; morning.—Patient could not be roused. Reflexes as on previous day ; pulse 56 to 60. Seen by Dr. Symonds, who diagnosed left-sided cerebellar abscess and advised immediate operation. Pulse gradually rose, and immediately before operation was 90 and irregular. At operation (R.J.C.) a large abscess was found in left cerebellar lobe with 1 oz. of serous foul-smelling pus, cerebro-spinal fluid hazy. Patient made a good recovery and was discharged on December 22, 1926.

Left-sided Temporo-sphenoidal Abscess with Aphasia.

By W. M. MOLLISON, M.Ch.

For account of case see E. H. Richards, in *Guy's Hospital Reports*, 1924, lxxiv, 109.

Superficial Abscess of the Brain.

By W. H. OGILVIE, M.Ch. (introduced by Mr. T. B. LAYTON).

See *Proceedings*, 1922, vol. xv (Sect. Otol.), 39.

After-history.—For the first two months after discharge from hospital there was some mental confusion, and she was very emotional. Since that time she has had no trouble. She has had no fits or fainting attacks. In spite of long absence she was in the top class at school. At the age of 14 she was hit over the skull defect by a cricket ball, and was unconscious for one hour. She now earns a living by making hats.

Present Condition.—General health good. There is an extensive cranial defect, but no tenseness or protrusion of cranial contents. Deafness in left ear.

Slight facial weakness on right side. Motor power and reflexes in limbs equal on both sides. Grip of right hand as good as that of left. No astereognosis on right side, movements a little more deliberate than those of the left hand. No sensory impairment.

Superficial Abscess of the Brain.

By C. GILL-CAREY, F.R.C.S.Ed.

GIRL, aged 9. Admitted to hospital April 8, 1926, with acute mastoiditis (left). Operation same day ; pus in mastoid cells ; dura mater of middle fossa injured but not perforated by a spicule of bone.

Convalescence uneventful until April 29, when, at 3 a.m., she became unconscious and foamed at the mouth ; and coarse tremors developed on the whole of the right side of the body. Consciousness regained at 8 a.m. Movements of the right side were then localized to the leg.

Operation same day. Dura opened at the site of injury and pus found about ¼ in. from the surface.